AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0022] with the following:

--[0022] Image data from image generation system 140 is communicated via link 212 to operator interface system 160. The image data used by software at operator interface system 160 for exam prescription and visualization is stored in image database 150. The image data may be archived 167, put on film 168 or sent over a network 169 to post-processing system 180 for analysis and review, including 3D post-processing. The post-processing software used in post-processing system 180 performs segmentation of cardiac image volume data to extract relevant substructures such as the right atrium and coronary sinus vessel, defining a subvolume or 3D model of the substructure. The post-processing software also provides 3D renderings, including immersible (or navigator) views, that is, visualization from the inside, of the right atrium and coronary sinus. These special views can be saved in a 3D rendering file 182, and a geometric model of these structures and substructures can be saved to a 3D model file 184, which are saved in image database 150, and may be viewed by the operator of operator interface system 160 during either the medical planning of the intervention procedure or during the interventional procedure itself, such as in combination with a projection image during a 3D-fluoroscopy procedure, which is alternatively referred to as an interventional image. In the case of the coronary sinus, the inner vessel surface is clearly defined in 3D rendering 182 and 3D model 184. The 3D model 184 may include anatomical, or geometric, landmarks, such as, for example, the right atrium, coronary sinus, or thebesian valve, that can be used for 3D registration of the 3D model 184 with the coordinate system of the respective anatomical structures viewed on the operator interface system 160 during an interventional procedure, thereby enabling concurrent use of the 3D model 184 during a subsequent interventional procedure, such as with a projection image during a 3D-fluoroscopy procedure. The coordinate system relating to the anatomical structures as viewed during an interventional procedure is referred to as the interventional

coordinate system. The 3D model 184 can be exported in at least one of several formats: a wire mesh geometric model; a solid geometric model; a set of contours associated with each image slice; a segmented volume of binary images; a run-length encoded binary segmentation mask (wherein a segmentation mask is representative of the location of voxels of interest); or a medical digital imaging object using a radiation therapy (RT) object standard or similar object. Other formats known in the art can also be used to store and export the 3D models 184. Additionally, the operator can view the 3D rendering and model 182, 184 on a display 186. The 3D renderings can contain 3D camera information (3D position, view angles, and view-up vector, for example) which specify how the interventional system can render the 3D model at the same orientation. In another embodiment, the operator interface system 160 could contain the functions of the post-processor system 180. In yet another embodiment, display 186 may be integrated with displays 164 and 166.--

Please replace paragraph [0033] with the following:

--[0033] At step 340, a 3D model of the right atrium and/or coronary sinus is exported using at least one a format of choice to an image database. Possible formats include: a wire mesh geometric model; a solid geometric model; a series of contours associated with each image slice; a segmented volume of binary images; a run-length encoded binary segmentation mask; and a medical digital imaging object such as the radiation therapy medical digital imaging object being used under radiation therapy medical digital imaging industry standards. In an exemplary embodiment, all non-relevant data in the binary images are set to zero and the segmented volume of binary images includes only the non-zero information. The value of the voxels correspond to CT attenuation, and the density of a tissue expressed in Houndsfield units makes up the segmented volume of binary images. In another embodiment, a binary segmentation mask specifies the location of all relevant voxels within the original volume itself.--